COURSE AND CONTACT INFORMATION
Course: Statistics 6201 - Mathematical Statistics - Section 11
Semester: Fall 2014
Time: Thursday 6:10-8:40 PM
Location: 2020 K 11

INSTRUCTOR
Name: Dr. Yaji Xu
Campus Address: 801 22nd St NW, Rome 676
E-mail: yajixu@gwu.edu
Office hours: Wednesday 2:30-4:30 PM
Grader: TBA

COURSE CONTENT
This is the first part of a two-semester course in Mathematical Statistics. Probability theory is presented as a mathematical foundation for statistical inference. Axiomatic probability is introduced and then some standard discrete and continuous probability distributions are presented. Joint distributions and transformations are discussed. Probabilistic convergence concepts are introduced. Chapters 1 - 5 from the textbook will be covered. Some external readings may be assigned. Any changes will be announced in the class.

COURSE PREREQUISITES
Math 33 (Multivariable Calculus), Math 124 (Linear Algebra). Please refresh your calculus and algebra if you have not taken these courses recently.

TEXTS
- Statistical Inference (Second Edition) by Casella, George and Berger, Roger
  Publisher: Duxbury Press. ISBN/ISSN 0-534-24312-6
- Supplementary Text: Introduction to Mathematical Statistics (7th Edition), by Hogg, McClean and Craig; Publisher: Prentice Hall; ISBN 9780321795434

BLACKBOARD REGISTRATION
All students are required to register for the course in Blackboard, the GWU web-based instructional resource. Course information and materials, including notes, grades, and details about course assignments and quizzes will be posted there periodically. It is the student’s responsibility to check the Stat 6201 Blackboard website frequently for up-to-date information about assignments. Once enrolled in the course, you should automatically be registered on Blackboard. Log into the course website at:
https://blackboard.gwu.edu/webapps/portal/frameset.jsp

GRADING
- Assignments: 30%
- Quizzes: 10%
- Exams: 60% (Midterm 25% & Final 35%)
CLASS POLICIES

- **Homework:** Weekly homework will be assigned in class on Thursday and will be due in two weeks.
- **Quizzes:** There will also be two 30 minute in-class closed book quizzes roughly around Week 4 and Week 11 and will be announced in advance.
- **Exams:** There will be a Midterm (Tentatively Scheduled for Thursday, October 16, 2014) and a Final exam (TBA). All exams are closed book. However you can bring a sheet of formulas (defined as a one page sheet of letter paper with writing on both sides if necessary) to the exams.

LEARNING OUTCOMES

As a result of taking this course students should be able to:

- Make probabilistic arguments and use key theoretical tools to explore the properties of random variables.
- Derive fundamental results in the theory of probability and random variables.
- Formulate probabilistic models for science, engineering, economics, public policy and many other areas of application.
- Recognize and appreciate the interplay between probability and statistics.
- Apply core skills in new contexts.

NOTES

- Late work will not be accepted, and **No Make-up Exams**, except in rare instances (e.g. well-documented medical problems). In order to **qualify** to take a make-up examination, you must contact me **prior** to the exam and have a University approved excuse with documentation to verify that excuse. If the absence is not excused according to University guidelines, the examination grade will be recorded as a zero. **There will be no exceptions.**
- Students must notify me during the first week of the semester of planned absences for religious observances. Please consult the Religious Holiday Calendar under Files in Blackboard for a list of recognized religious holidays by GW.
- No incomplete grades will be assigned for marginal or failing grades at the end of the semester. There will be no extra credit work available to improve your final grade besides what is already outlined in the syllabus. Your grade will be determined as outlined above. **There will be no exceptions.**
- It is important that you attend classes. You are responsible for any material covered or any announcements made in class. You **MUST** keep your cell phone ringer off during classes.

ACADEMIC INTEGRITY

All examinations, papers, and other graded work products and assignments are to be completed in conformance with The George Washington University Code of Academic Integrity. “Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information.” For the remainder of the code, see: [http://www.gwu.edu/~ntegrity/code.html](http://www.gwu.edu/~ntegrity/code.html)
SUPPORT FOR STUDENTS OUTSIDE THE CLASSROOM

DISABILITY SUPPORT SERVICES (DSS)
Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information please refer to: http://gwired.gwu.edu/dss/

UNIVERSITY COUNSELING CENTER (UCC) 202-994-5300
The University Counseling Center (UCC) offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include: 1. crisis and emergency mental health consultations; 2. confidential assessment, counseling services (individual and small group), and referrals
http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices

SECURITY
In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.